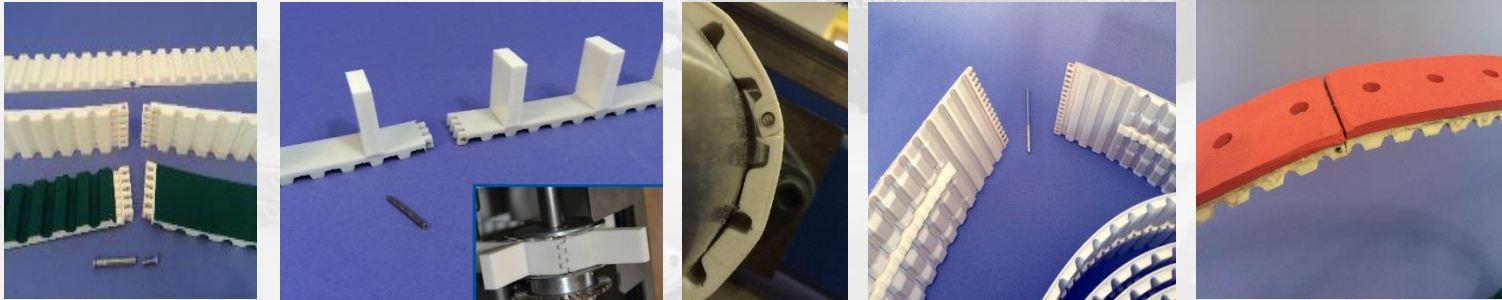
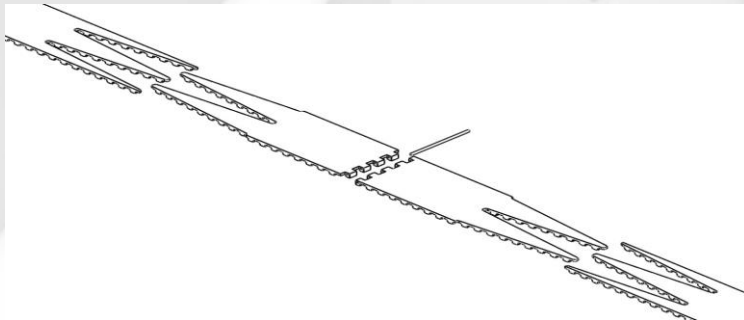


ERO Joint® HP Timing PU Belt Technical Data



Principle

ERO Joint® HP is a **patented mechanical fastening solution** for polyurethane belts. One **hinge axis** with a unique **stainless steel pin** are used to close the belt. The hinge part is **directly welded on the standard timing belt**, with the **same parameters** as a standard welding procedure (temperature, pressure, time ...)



Hinge part is produced in one **150 mm width plate** (except AT5 – 100 mm) and cut **to the belt width**. ERO Joint® HP belts are available with **all types of coating and all types of guiding or machining**.

Mechanical strength and lifetime are the **same as welded PU belts**. Nylon Back polyamide textile is possible, Nylon Tooth is on request, contact us for more details.

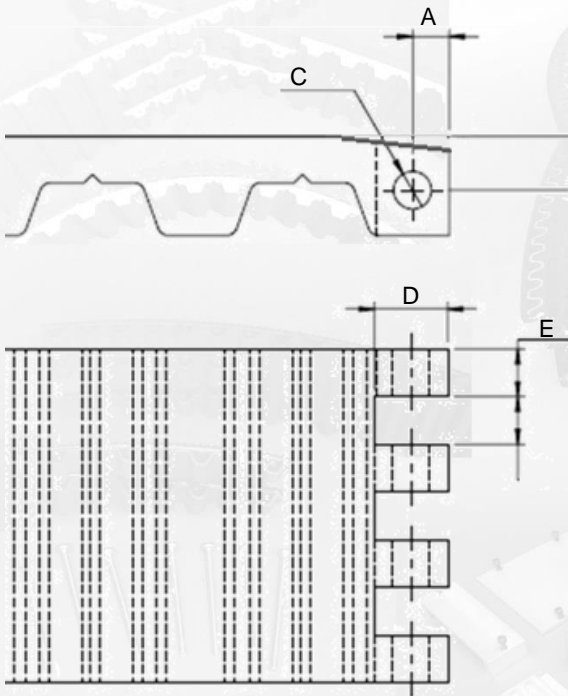
Operating Data

Pitch available: H, T10, AT10, T20, AT20, 8M, 14M and AT5
 Standard fabrication: Polyurethane 90 shore A light grey
 Cables: One polymer cable around the pin in each hinge teeth. Each cable is parallel to each other
 Width: Every width from 10 to 450mm (standard production of junction plates is 150mm except AT5 – 100mm)

Pitch	8M	T10	AT10	H	14M	T20	AT20	AT5
Min. pulley diameter (mm)	51	44	47	56	124	95	115	23
Min. pulley diameter (teeth)	20	14	15	14	28	15	18	15
Min. back bend diameter (mm)	120	80	120	79	200	120	180	60
Allowable tension force ERO Joint® HP hinge part (N/25mm)	1871	1170	1871	970	2578	1871	2930	1030
Allowable tension force welded belt aramid cables (N/25mm)	1313	798	1313	810	1136	1313	1313	1210
Allowable tension force welded belt steel cables (N/25mm)	1871	954	1871	970	2578	1871	2930	1761
Allowable tension force welded belt HF cables (N/25mm)	1728	1170	1728	1189	2235	1728	/	/

ERO Joint® HP allowable tension force is **the same as a welded belt for every pitch and every cables** (exception for H pitch with HF cables and AT5 belts).

ERO Joint® HP Hinge Part Data


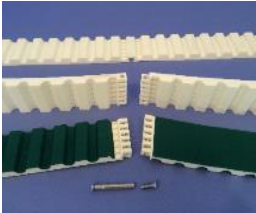



	8M	T10	AT10	H	14M	T20	AT20	AT5
A	2	1.9	1.9	1.85	3.8	3.8	3.4	1.1
B	2.8	2.45	2.45	2.15	4.95	4.3	2.83	1.85
C	1.9	1.9	1.9	1.7	4.3	4.3	2.4	1
D	3.7	3.5	3.5	3.4	7.3	7.3	7.115	2.2
E	2.273	2.273	2.273	2.273	3.15	3.15	3.2	2.273
Pin Ø	2	2	2	1.8	4.4	4.4	2.5	1

Teeth width are **2.273mm** and **3.15mm** (except AT20).
This let complete teeth for standard width:

	AT5, T10, AT10, 8M, H	T20, 14M	AT20
Belt width	Number of teeth		
16	7.04	5.08	5.00
25	11.00	7.94	7.81
32	14.08	10.16	10.00
50	22.00	15.87	15.62
75	33.00	23.81	23.44
100	43.99	31.75	31.25
150	65.99	47.62	46.87

ERO Joint® HP compare to ERO Joint® and ERO Joint® WT

	ERO Joint® WT	ERO Joint® HP	ERO Joint® (standard)
	WT = Wide Timing	HP = Hinge Pin	Like Pin Joint
Pitch	WT10 - WH	T10 - AT10 - H - T20 - AT20 - 8M - 14M	T10 - AT10 - 8M - 14 M
Width	150 mm to 1828 mm	10 mm to 450 mm	16 mm to 100 mm
Allowable traction force	400N for 150 mm width (Customer data)	Like welded belts (1170N / 25mm T10) (1871N / 25mm AT10)	Very weak (300N / 25mm T10) (300N / 25mm AT10)
Principle	3 flat rods	1 hinge pin	8 or 10 pins
Photo			

Details about ERO Joint® HP for Food Industry

- Blue Polyurethane coating meets the requirements of regulations 1935/2004, 2023/2006 and 10/2011
- Transparent Polyurethane ERO Joint® HP non-food contact component (however no danger, see the migration tests)
- Traction components are in non-food fiber - Stainless Steel pin 316L without food grade certification

For machines without tensioning system, we can provide a **tensioning tool**:

For more information about ERO Joint® HP and other ERO Joint® solutions, visit our website:
www.ero-joint.com

